

DEPARTMENT OF TRANSPORTATION

National Highway Traffic Safety Administration

[Docket No. NHTSA-2020-0117; Notice 2]

Sumitomo Rubber Industries, Ltd., and Sumitomo Rubber North America, Inc., Denial of Petition for Decision of Inconsequential Noncompliance

AGENCY: National Highway Traffic Safety Administration (NHTSA), Department of Transportation (DOT).

ACTION: Denial of petition.

SUMMARY: Sumitomo Rubber Industries, Ltd. and Sumitomo Rubber North America, Inc. (collectively, "Sumitomo") have determined that certain Sumitomo and Falken truck tires do not fully comply with Federal Motor Vehicle Safety Standard (FMVSS) No. 119, New Pneumatic Tires for Motor Vehicles with a GVWR of More Than 4,536 Kilograms (10,000 Pounds) and Motorcycles. Sumitomo filed a noncompliance report dated November 12, 2020. Sumitomo subsequently petitioned NHTSA on December 4, 2020, and later amended its petition on April 8, 2021, and July 9, 2021, for a decision that the subject noncompliance is inconsequential as it relates to motor vehicle safety. This notice announces the denial of Sumitomo's petition.

FOR FURTHER INFORMATION CONTACT: Jayton Lindley, General Engineer, NHTSA, Office of Vehicle Safety Compliance, (325) 655-0547.

SUPPLEMENTARY INFORMATION:

I. Overview: Sumitomo has determined that certain Sumitomo and Falken truck tires do not fully comply with the requirements of paragraph S6.1.2(a) of FMVSS No. 119, *New Pneumatic Tires for Motor Vehicles with a GVWR of More Than 4,536 Kilograms (10,000 Pounds) and Motorcycles* (49 CFR 571.119). Sumitomo filed a noncompliance report dated November 12, 2020, pursuant to 49 CFR part 573, *Defect and Noncompliance Responsibility and Reports*.

Sumitomo subsequently petitioned NHTSA on December 4, 2020, and later amended its petition on April 8, 2021, and July 9, 2021, for an exemption from the notification and remedy requirements of 49 U.S.C. Chapter 301 on the basis that this noncompliance is inconsequential as it relates to motor vehicle safety, pursuant to 49 U.S.C. 30118(d) and 30120(h) and 49 CFR part 556, *Exemption for Inconsequential Defect or Noncompliance*.

Notice of receipt of Sumitomo's petition was published with a 30-day public comment period, on October 12, 2021, in the **Federal Register** (86 FR 56750). No comments were received. To view the petition and all supporting documents log onto the Federal Docket Management System (FDMS) website at https://www.regulations.gov/. Then follow the online search instructions to locate docket number "NHTSA-2020-0117."

II. Tires Involved: Approximately 8,275 of the following Sumitomo and Falken truck and bus radial tires, manufactured between January 26, 2020, and June 2, 2020, are potentially involved:

- Sumitomo ST900 11R24.5 16PR
- Sumitomo ST528 11R24.5 16PR
- Sumitomo ST528 11R22.5 16PR
- Sumitomo ST710SE 11R22.5 144/142L
- Sumitomo ST710SE 285/75R24.5 144/141L
- Sumitomo ST710SE 11R24.5 146/143L
- Sumitomo ST788+SE 285/75R24.5 144/141L
- Sumitomo ST709SE 285/75R24.5 144/141L
- Sumitomo ST709SE 11R24.5 149/146L
- Sumitomo ST778+SE 11R24.5 149/146L
- Sumitomo ST788SE 285/75R24.5 147/144L
- Sumitomo ST948SE 11R24.5 149/146L
- Sumitomo ST908N 11R22.5 146/144L
- Sumitomo ST788SE 11R22.5 146/143L

- Sumitomo ST788SE 11R24.5 149/146L
- Sumitomo ST719SE 11R22.5 146/142L
- Sumitomo ST719SE 11R24.5 149/146L
- Sumitomo ST719SE 285/75R24.5 147/144L
- Sumitomo ST948SE 285/75R24.5 144/141L
- Sumitomo ST938 11R24.5 149/146L
- Falken RI130EC 11R22.5 146/143L
- Falken RI130EC 11R24.5 149/146L
- Falken GI388 11R24.5 149/146K
- Falken RI150EC 11R22.5 146/143L
- Falken RI130EC 285/75R24.5 147/144L
- Falken RI151S 315/80R22.5 156/150L
- III. Noncompliance: Sumitomo explains that the noncompliance is that the subject tires may show visual evidence of bead separation near the edge of the rim flange when tested in accordance with paragraph S7.2 of FMVSS No. 119, and therefore, do not fully meet the requirements specified in paragraph S6.1.2(a) of FMVSS No. 119. Specifically, the bead separation is due to the heat-induced expansion caused by the misplacement of the joint tape and a change in the tape's composition.
- **IV. Rule Requirements:** Paragraph S6.1.2(a) of FMVSS No. 119 includes the requirements relevant to this petition. When tested in accordance with the procedures of S7.2, a tire shall exhibit no visual evidence of tread, sidewall, ply, cord, innerliner, or bead separation, chunking, broken cords, cracking, or open splices.
- V. Summary of Sumitomo's Petition: The following views and arguments presented in this section, "V. Summary of Sumitomo's Petition," are the views and arguments provided by Sumitomo and do not reflect the views of the Agency. Sumitomo describes the subject

noncompliance and contends that the noncompliance is inconsequential as it relates to motor vehicle safety.

In support of its petition, Sumitomo begins by citing several decisions NHTSA has published regarding its considerations in evaluating inconsequential noncompliance petitions. Sumitomo quotes NHTSA as saying that "the issue to consider is the consequence to an occupant who is exposed to the consequence of that noncompliance" and that NHTSA also considers the "specific facts before it in a particular petition" and "whether an occupant who is affected by the noncompliance is *likely to be exposed to a significantly greater risk than an occupant in a compliant vehicle* [emphasis added by Sumitomo]."

Sumitomo continues by explaining the definition of "bead separation" and describing the history of FMVSS No. 119 S6.1.2 and the visual inspection criteria. Sumitomo states that the criteria NHTSA uses were based on Society of Automotive Engineers (SAE) recommended practices and in an amendment to FMVSS No. 109, NHTSA clarified that it considers visual evidence of tread, sidewall, ply, cord, innerliner, or bead separation, chunking, broken cords, cracking or open splices "to be evidence of structural weakness which may cause tire failure." According to Sumitomo, NHTSA "did not present any further explanation or evidence to support the notion that these characteristics, standing alone, are evidence of structural weakness that could lead to a tire failure" and that the evidence does not alone prove that the tire has "a structural weakness that will cause it to fail" or be consequential to motor vehicle safety.

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¹ See General Motors, LLC, Denial of Petition for Decision of Inconsequential Noncompliance, 85 FR 71713 (Nov. 10, 2020); see also General Motors Corp.; Ruling on Petition for Determination of Inconsequential Noncompliance, 69 FR 19897 (Apr. 14, 2004).

² See BMW of North America, LLC; Jaguar Land Rover North America, LLC; and Autoliv, Inc.; Decisions of Petitions for Inconsequential Noncompliance, 84 FR 19994 (May 7, 2019) (citing General Motors, LLC., Grant of Petition for Decision of Inconsequential Noncompliance, 81 FR 92963 (Dec. 20, 2016)).

³ See Cosco Inc.; Denial of Application of Inconsequential Noncompliance, 64 FR 29408 (Jun. 1, 1999).

⁴ See Initial Final Rule for FMVSS No. 109, 32 FR 15792 (Nov. 16, 1967).

⁵ See SAE Recommended Practice J918b, "Passenger Car Tire Performance Requirements and Test Procedures," December 1966. 32 FR 10812 (Jul. 22, 1967) (the 1967 Amended NPRM for FMVSS No. 109).

⁶ See 37 FR 19381 (Sep. 20, 1972) (1972 NPRM Amending FMVSS No. 109).

⁷ *Id*.

Sumitomo then asserts that the structural integrity of the subject tires is unaffected by the deformation. Sumitomo specifies that the misplaced joint tape and "a change in the tape's composition" altered the adhesiveness of the rubber which results in the subject noncompliance. Therefore, Sumitomo claims that since "joint tape is not a structural component of the tire" the subject noncompliance does not indicate "structural weakness" nor does it impact "the integrity of the adjacent components.

Sumitomo then outlines the manufacturing of the subject tires, explaining that the joint tape is an adhesive that joins the inner liner ends and then the other components are added and the tire "undergoes vulcanization (applying heat and pressure for a set period) to fully adhere the components and complete the tire forming process." Sumitomo explains that the "lack of adhesion between the joint tape and components" can cause the "percentage of butyl rubber content" to be increased in the bead area which can result in the material becoming more vulnerable to heat expansion. This condition, combined with the lack of adhesion in the joint tape, could lead to the small area becoming more "susceptible to separations." According to Sumitomo, although this condition exists "[t]he steel filler cords next to this area contain the deformation and prevents it from propagating." Sumitomo provides photographs and illustrations in its petition to show that "the deformation occurs outside the structural components of the tire."

To further support its claims, Sumitomo submits data from several endurance tests, the details of which can be found in Sumitomo's petition and the supplements to its petition.⁸

Sumitomo states that these tests resulted in the tires developing the subject noncompliance "as expected" and that when tested under the most "extreme" circumstances the subject tires "developed a surface crack" in the same area. Sumitomo claims that "even in these unrealistically severe conditions, the tire did not develop air leaks or otherwise structurally fail," leading Sumitomo to conclude that the "testing demonstrates that the deformations that may

 $^{8} \textit{See} \ \text{https://www.regulations.gov/document/NHTSA-2020-0117-0001}.$

form due to the misplaced joint tape are not indicative of a structural weakness and will not cause air loss." Sumitomo adds that it is not aware of any tire failures, air loss, crashes, or injuries related to this issue.

Sumitomo concludes that the subject noncompliance is inconsequential as it relates to motor vehicle safety, and that its petition to be exempted from providing notification of the noncompliance, as required by 49 U.S.C. 30118, and a remedy for the noncompliance, as required by 49 U.S.C. 30120, should be granted.

VI. NHTSA's Analysis:

A. General Principles

The burden of establishing the inconsequentiality of a failure to comply with a performance requirement in an FMVSS—as opposed to a labeling requirement with no performance implications—is more substantial and difficult to meet. Accordingly, the Agency has not found many such noncompliances inconsequential.⁹

An important issue to consider in determining inconsequentiality is the safety risk to individuals who experience the type of event against which the recall would otherwise protect.¹⁰ In general, NHTSA does not consider the absence of complaints or injuries when determining if a noncompliance is inconsequential to safety. "Most importantly, the absence of a complaint does not mean there have not been any safety issues, nor does it mean that there will not be

⁹ Cf. Gen. Motors Corporation; Ruling on Petition for Determination of Inconsequential Noncompliance, 69 FR 19897, 19899 (Apr. 14, 2004) (citing prior cases where noncompliance was expected to be imperceptible, or nearly so, to vehicle occupants or approaching drivers).

¹⁰ See Gen. Motors, LLC; Grant of Petition for Decision of Inconsequential Noncompliance, 78 FR 35355 (June 12, 2013) (finding noncompliance had no effect on occupant safety because it had no effect on the proper operation of the occupant classification system and the correct deployment of an air bag); Osram Sylvania Prods. Inc.; Grant of Petition for Decision of Inconsequential Noncompliance, 78 FR 46000 (July 30, 2013) (finding occupant using noncompliant light source would not be exposed to significantly greater risk than occupant using similar compliant light source).

safety issues in the future."¹¹ "[T]he fact that in past reported cases good luck and swift reaction have prevented many serious injuries does not mean that good luck will continue to work."¹²

NHTSA has evaluated the merits of the inconsequential noncompliance petition submitted by Sumitomo; however, the Agency does not agree that the subject noncompliance is inconsequential to motor vehicle safety.

B. NHTSA's Response to Sumitomo's Petition

The visual inspection requirements of the tire safety standards exist to identify defects or structural weaknesses that can result in immediate or premature tire failure. NHTSA considered several factors specific to this petition and disagrees that the visible separation described is inconsequential to motor vehicle safety.

Structural Integrity of the Tire

Sumitomo states that the visible separation is caused by both "a misplacement of joint tape" and "a change in the tape's composition" that "altered the rubber's adhesiveness." The visible separation near the bead area appears after endurance testing, or when the tire is put into service. The visible separation appears as a small bulge near the bead area on the tire, and the separation is apparent once the tire is cut for inspection.

NHTSA reviewed the tests performed by the petitioner to assess the effects of the noncompliance on the structural integrity of the tire, and on which they based their belief that the noncompliance is inconsequential to safety. These tests placed the tires under various loading and inflation conditions for long durations, and the tires maintained both inflation and structural integrity in each of the scenarios tested. While meaningful, these results have limitations in assessing the safety related consequences of the noncompliant tires. The limitations identified by the Agency are:

¹¹ Morgan 3 Wheeler Limited; Denial of Petition for Decision of Inconsequential Noncompliance, 81 FR 21663, 21666 (Apr. 12, 2016).

¹² United States v. Gen. Motors Corp., 565 F.2d 754, 759 (D.C. Cir. 1977) (finding defect poses an unreasonable risk when it "results in hazards as potentially dangerous as sudden engine fire, and where there is no dispute that at least some such hazards, in this case fires, can definitely be expected to occur in the future").

- a) Sample Size and Selection: Of the 10 tires tested by Sumitomo, only one tire was from the affected population. The remaining nine tires were produced for the testing with replicated noncompliances based on the manufacturer's determination of the root cause of the noncompliance. Further, a total of 11 different tire size, speed rating, and load capacity/ply rating combinations are represented in the affected population. The tires that were tested represented only 6 different combinations of tire size, speed rating, and load capacity/ply rating. Overall, the tested population did not sufficiently represent the affected population in either the quantity of tires tested or the tire size, speed, and load ratings.
- b) *Tire Aging*: As tires age, they can become more brittle. As the rubber becomes more brittle the subject defect may grow and cause tire failure or air loss. None of the testing performed by Sumitomo addressed this failure mode.
- c) Environmental Conditions & External Damage: During real world use, the tires will experience harsh environmental conditions beyond what was simulated during testing. Additionally, these tires will be subjected to damage in routine service such as curb impacts or scrubbing. Damage of this type may tear the bulge and create additional structural problems that would not occur in a tire without this defect.
- d) Sufficiency of Test Conditions: The Agency appreciates the attempts made by Sumitomo to determine if the subject defect in the tires and resulting noncompliance is inconsequential to motor vehicle safety, however it is not possible for the petitioner or the Agency to know with certainty if the testing performed is sufficient without conducting a much more thorough research project. The Agency believes that the results of these limited testing scenarios are not sufficient to determine that the noncompliance does not increase risk to either the vehicle operators or the public at large.

The FMVSS sets the minimum performance standards that are intended to ensure a minimum level of safety and the Agency does not agree the testing completed by Sumitomo is

sufficient to ensure that the noncompliance is inconsequential to safety.

Other Safety Concerns

NHTSA has also identified other potential safety concerns. If the noncompliant tires

containing this separation were to be put into service, there is an increased risk for the separation

to expand beyond what has been demonstrated by the petitioner, potentially resulting in tire

failure. Tire failures not only impact the vehicle operator but may also impact other vehicles

who share the road. Additionally, commercial tire debris is a common cause of both accidents

and damage that will affect other vehicles and highway safety overall.

Furthermore, downstream entities involved in tire repair and retreading operations may

be unable to safely use these tires. Commercial vehicle tires are commonly re-treaded, and the

long-term effects of this noncompliance are unknown. This defect may potentially result in a

weakened tire carcass that will prematurely fail. Sumitomo did not perform any testing that

might address this concern, nor did they make any statements about potential effects on the re-

tread process.

NHTSA's Decision: In consideration of the foregoing, NHTSA has decided that Sumitomo has

not met its burden of proof that the subject FMVSS No. 119 noncompliance is inconsequential to

motor vehicle safety. Accordingly, Sumitomo's petition is hereby denied and Sumitomo is

consequently obligated to provide notification of and free remedy for that noncompliance under

49 U.S.C. 30118 and 30120.

(Authority: 49 U.S.C. 30118, 30120: delegations of authority at 49 CFR 1.95 and 501.8)

Anne L. Collins